

FIGURE 1

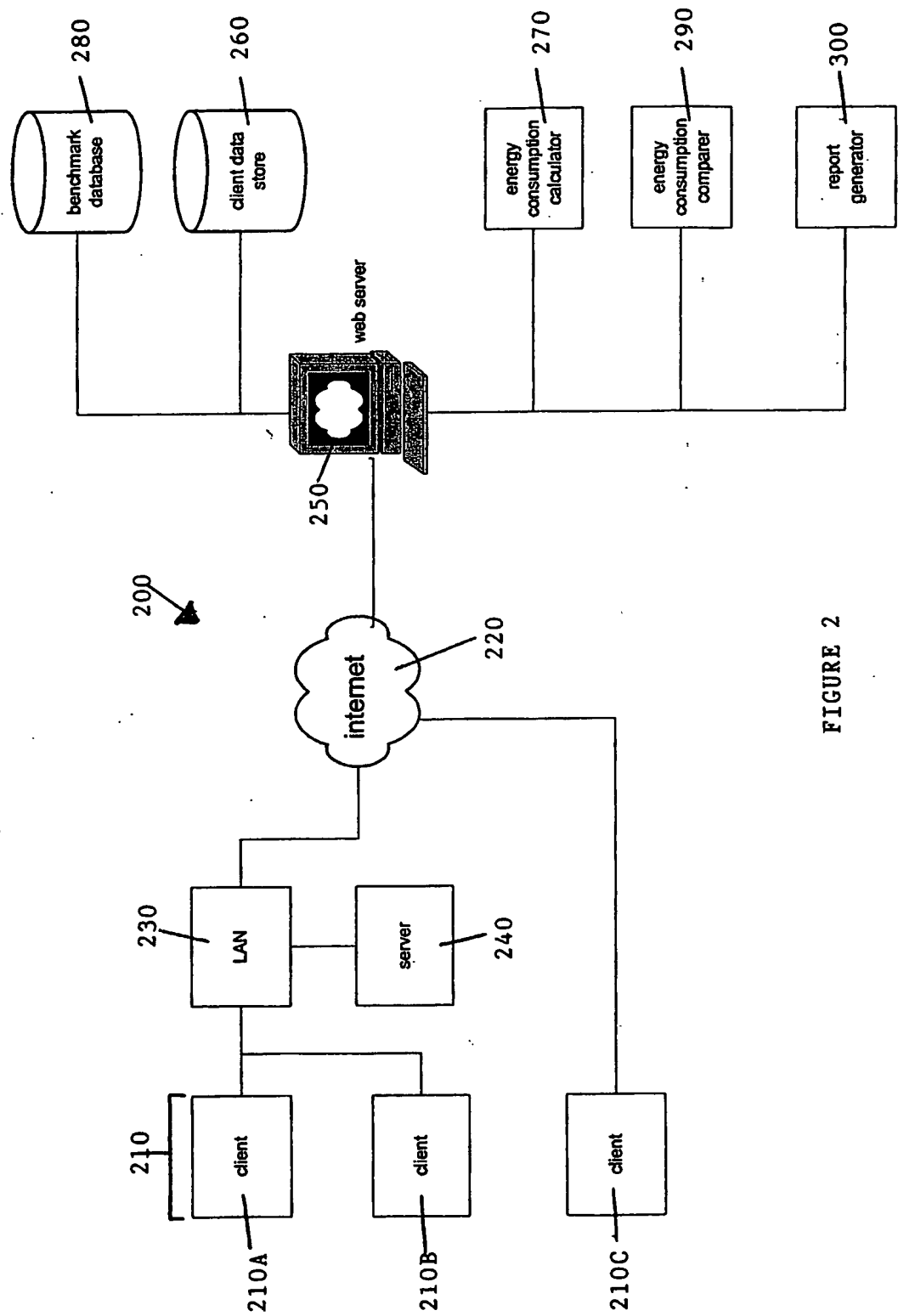


FIGURE 2

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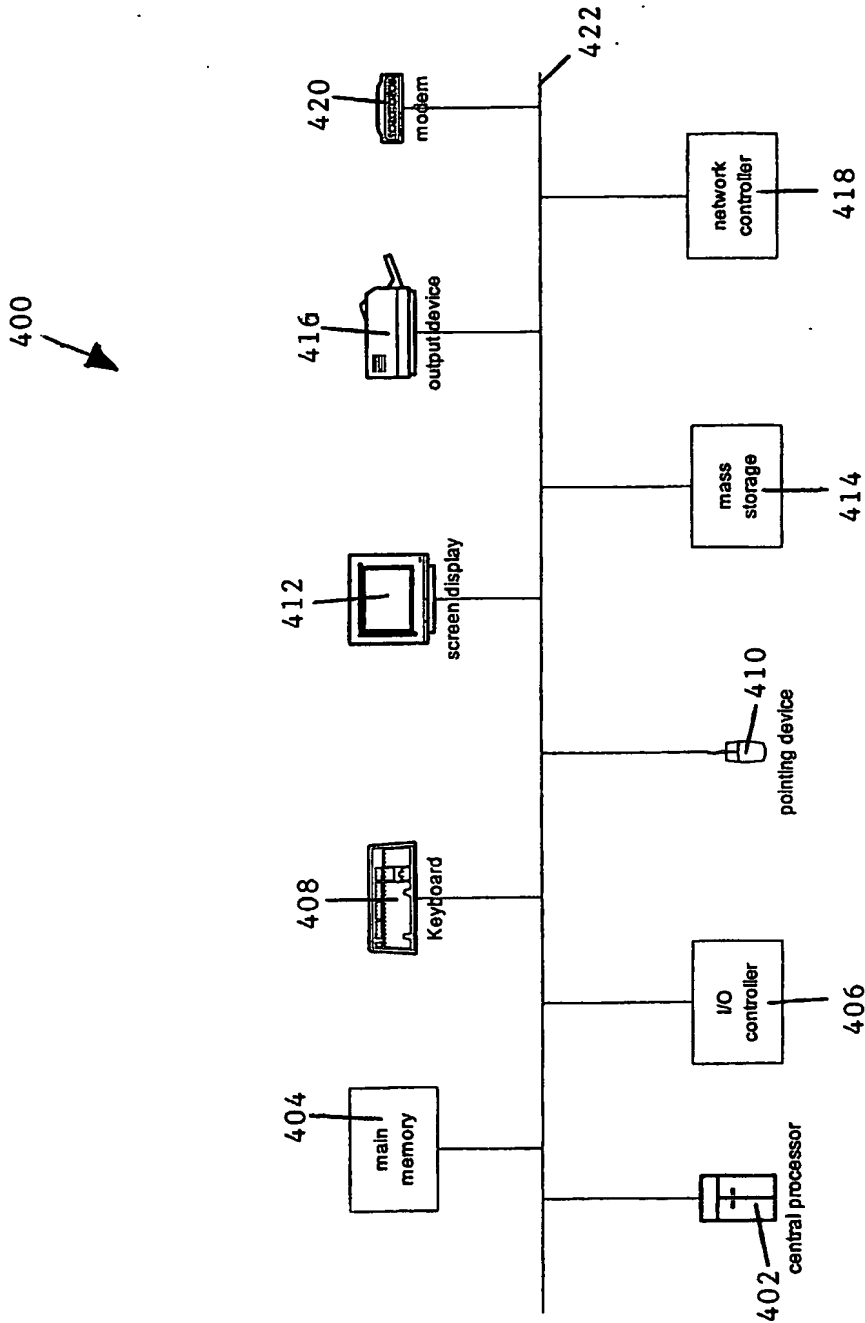


FIGURE 3

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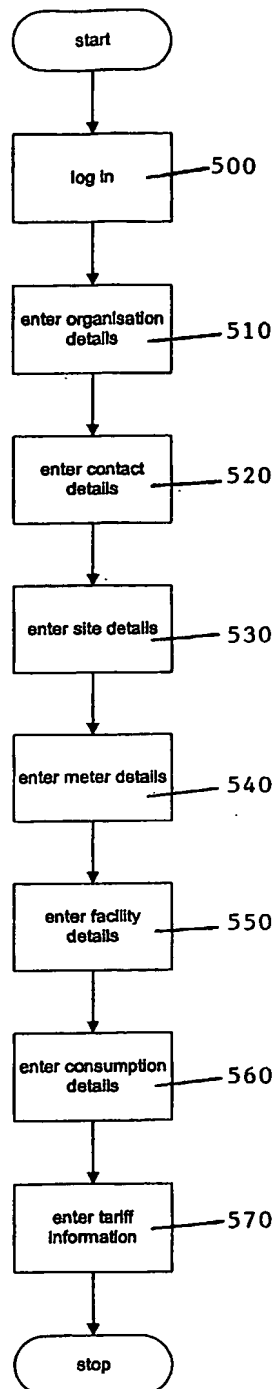


FIGURE 4

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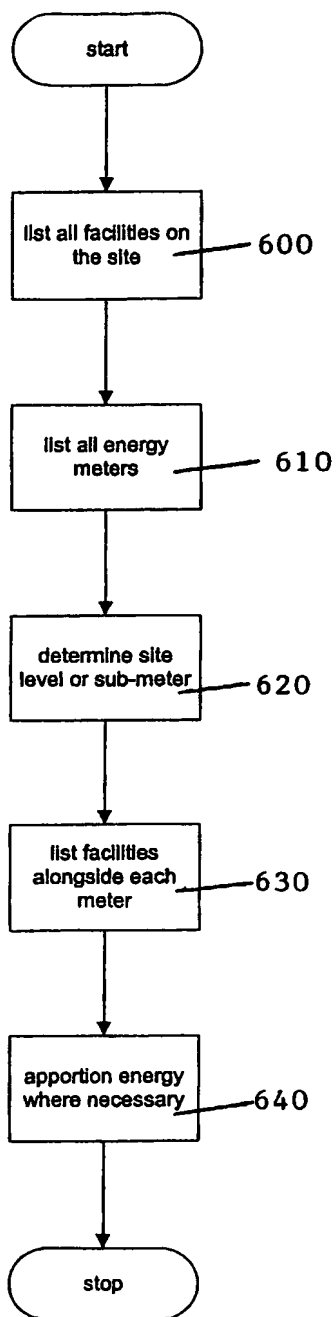


FIGURE 5

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**Energy Map Process at end Step 4**

<b>Facility</b>	<b>Energy Sources</b>	<b>Floor Area (000 Metres)</b>
Admin	Elec, Diesel	15
Ward 1	Elec, Gas	25
Ward 2	Elec, Gas, Diesel	28
Laundry	Elec, Gas	4
Operating Theatres	Elec, Gas, Diesel	6
Heat Plant	Coal, Elec	0.5
<b>Total</b>		<b>78.5</b>

<b>Meters</b>	<b>Energy</b>	<b>Ann. Consum. (000 kWh)</b>	<b>Sub or Site</b>	<b>Facilities Supplied (Directly)</b>
Site Elec	Elec	2300	Site	Admin
ElecSub1	Elec	1000	Sub	Ward2, Heat Plant, Operating Theatre
ElecSub2	Elec	750	Sub	Operating Theatre, Ward1
ElecSub3	Elec	250	Sub	Laundry
Site Gas	Gas	1800	Site	Ward1, Ward2, Operating Theatres
GasSub	Gas	800	Sub	Laundry
Diesel	Diesel	150	Site	Admin, Operating Theatres, Ward2
Coal	Coal	850	Site	Heat Plant
<b>Total kWh*</b>		<b>4900</b>		

\*This total is for site level meters only. Submeters measure a portion of this energy.

**FIGURE 6**

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## Energy Mapping Process at end Step 5

Facility	Area	Meter	Consum	%	Notes
Admin	15	HS-11	15	0.3%	Pro-Rata based on floor area
Ward 1	15	HS-12	300	6.1%	Pro-Rata based on floor area
Ward 2	0.6	HS-13	850	17.2%	Pro-Rata based on floor area
Laundry	0.6	HS-14	14	0.3%	Pro-Rata based on floor area
Operating Theatres	4	HS-15	250	5.1%	Pro-Rata based on floor area
Heat Plant	4	HS-16	800	16.2%	Pro-Rata based on floor area
Ward 3	6	HS-17	60	1.2%	Pro-Rata based on floor area
Ward 4	6	HS-18	174	3.5%	Pro-Rata based on floor area
Ward 5	6	HS-19	145	3.0%	Pro-Rata based on floor area
Ward 6	6	HS-20	84	1.7%	Pro-Rata based on floor area
Ward 7	25	HS-21	605	12.3%	Pro-Rata based on floor area
Ward 8	25	HS-22	351	7.1%	Pro-Rata based on floor area
Ward 9	28	HS-23	75	1.5%	Pro-Rata based on floor area
Ward 10	28	HS-24	812	16.4%	Pro-Rata based on floor area
Ward 11	28	HS-25	393	7.9%	Pro-Rata based on floor area
Total kWh			4928		

## Apportioning Heat Plant Energy

Facilities Heated	Volume	Consumption (000 kWh)	Notes
Ward1	63	470	Pro-rata based on volume (Actual figures will be calculated by the application)
Admin	33	246	Pro-rata based on volume (Actual figures will be calculated by the application)
Op. Theatres	18	134	Pro-rata based on volume (Actual figures will be calculated by the application)
<b>Tot Volume</b>	<b>114</b>		

## Check Consumption for Each Facility (total consumption / floor area)

Facility	Tot. Consum (Incl heat plant)	kWh/sq. Metre
Admin	561	37
Ward 1	1425	57
Ward 2	1280	46
Laundry	1050	263
Operating Theatres	597	100
Heat Plant	14	29

FIGURE 7

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## ***Appendix A - Organisation Details***

### **Organisation Name**

Mandatory. Name of your Organisation

### **Organisation Website**

Please enter the address of the website of the organisation (if a website exists). Please only enter the part of the address that follows the 'http://' component (i.e. www.energyts.com).

### **Organisation Type**

Predefined. Choose the appropriate Organisation Type from the dropdown list. If none seem appropriate choose 'Other' and contact ETS so we can update the list.

### **Address**

Mandatory. Please enter the postal address for your Organisation.

FIGURE 8



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## ***Appendix B – Contact Details***

### **Position**

The Position held / Job title of this person.

### **Title**

Please insert the title of this contact (i.e. Mr, Mrs, Miss, Dr, etc).

### **First Name / Surname**

Mandatory. The First Name and Surname of this contact person.

### **Email**

Mandatory. Please enter the full email address for this person.

### **Address**

Mandatory. Please enter a physical (courier) address for this person.

### **DDI / Extension**

Mandatory. Please enter the landline number to reach this person (plus extension number if necessary). Include the area code.

### **Mobile**

User Assigned. Please enter a mobile phone number to reach the person.

### **Fax**

User Assigned. Please enter a fax number for this person. Include the area code.

FIGURE 9

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**Appendix C – Site Details****Region**

Predefined. Mandatory. Choose the appropriate region from the drop down list. The selection should be based on the closest location with the most similar year round temperatures.

**Site Name**

Mandatory. Enter the name of the site sufficient for you to be able to readily identify it from a list of all your sites.

**Site Description**

This is an optional field where any information and notes you consider useful may be entered.

**Site Start**

Approximate date on which the site was first opened, if known. Will default to 1-Jan-1900 if left blank.

**Site Finish**

Date on which the site closed or left the ownership of your Organisation.

**Address**

The physical location/address of the site.

**Indicator Period**

The year for which the site level indicators apply. This will be determined by the norms for different industry groups.

**Site Indicator 1**

This is an indicator used when preparing a site level efficiency indicator. These indicators will be particular to different industry groups.

**Site Indicator 2**

This is an indicator used when preparing a site level efficiency indicator. These indicators will be particular to different industry groups.

**Site Indicator 2**

This is an indicator used when preparing a site level efficiency indicator. These indicators will be particular to different industry groups.

FIGURE 10

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**Appendix D - Meter Details****Energy**

Predefined. Mandatory. Please choose from the drop down list which energy source this meter is measuring.

**Meter Type**

Applies to reticulated Gas and Electricity only. Predefined. Mandatory. Please select from the drop down list the type of metering installed to measure consumption of these energy sources.

**GXP / Network Company**

Applies to reticulated Gas and Electricity only. Predefined. Please select from the drop down list the distribution network company maintaining the connection to your site. Alternatively for Electricity please select the Grid Exit Point from the National Transmission Grid if known.

**ICP**

Applies to reticulated Gas and Electricity only. Please enter the ICP (Installation Control Point) number assigned to your site. This can usually be found on the bill.

**Rating**

Applies to reticulated Gas and Electricity only. For Electricity please enter the KVA rating for the connection. For Gas please enter the assigned MDQ (Maximum Daily Quantities – GJ's) for the connection.

**MHQ**

Applies to reticulated Gas only. Please enter the Maximum Hourly Quantity assigned to the connection (GJ's)

**Meter Start**

Mandatory. The date from which these meter details are applicable.

**Meter Finish**

The date until which the above meter details are applicable. This can also indicate instances where an energy source is no longer used (i.e. coal being phased out/replaced by other energy sources such as gas).

**Local Meter ID**

An optional field to fill in any identifier used within the Organisation to identify this meter / energy source.

**Local Meter Name**

An optional field for entering a name for this meter. Especially useful for quick differentiation when there are a number of sub-meters on a site.

**Meter Level**

Predefined. Mandatory. Choose from the dropdown list which level of metering applies for this meter. The Site Meter option is for a meter that measures the energy entering the site (facilities may be directly supplied from this meter). The Sub-Meter option applies when the meter measures energy usage subsequent to that energy passing through a Site Meter. Sub-meters are used to measure energy use at a specific facility or group of facilities.

**% Consumption**

User assigned. Mandatory. Used to determine the amount of energy passing through the meter that is consumed by a facility connected to that meter. It should be 100% in all cases where all the consumption of the meter is used by a single facility. In other cases it should be determined after an energy map has been created (see Appendix E).

FIGURE 11

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**Appendix F – Facility Details****Facility Type**

Predefined. Mandatory. Please choose from the drop down list the Facility Type that best describes the main use of this facility. If none of the options seem appropriate please select 'Other' and contact ETS so we can update the list. See Appendix I for a list of Facility Types and their definitions.

We recognise that many buildings are used for a number of different purposes. This is taken into account using sub-facilities that are detailed in the utilisation section later in this guide. However it is necessary to assign a primary purpose to the facility for comparisons to be made. This primary purpose should be the one that uses the majority of energy in the facility.

**Facility Name**

Mandatory. Please enter information that will allow you to easily differentiate the facility from others (e.g. building name).

**Facility Description**

Please enter any additional information or notes that further describe the facility.

**Facility Open**

Mandatory. Enter the date the facility opened for its current use.

**Facility Close**

Enter the date the facility was closed for its current use or was demolished.

**Facility Built**

Enter the date the facility was built. This may be different from the Facility Open date above.

FIGURE 12-1

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**Utilisation****% Windows**

Mandatory. Percentage of total exterior wall area comprised of windows.

**Air Changes**

Air-conditioned facilities only. The typical number of air-changes per hour.

**Air Conditioning**

Yes / No. Does the facility have an air-conditioning system.

**Air-Con Area (%)**

Air-conditioned facilities only. The percentage of the floor area of the facility that is air-conditioned.

**Air-Con Control**

Air-conditioned facilities only. Select from the dropdown list the control system that most closely reflects that used for the air-conditioning in this facility.

**Air-Con Filter**

Air-conditioned facilities only. Select from the dropdown list the filtration system that most closely reflects that used in this facility.

**Attendance Hours**

*Entertainment & Lecture Theatre Facilities only.* Mandatory. Attendance (number of people) times hours of 'showtime', per week.

**Batch Laundry**

*Laundry Facilities only.* Mandatory. The amount of laundry washed per week (kilograms) in a batch process.

**Bench Area**

*Laboratory Facilities only.* Mandatory. The total laboratory bench area in the facility (square metres).

**Books**

*Library Facilities only.* Mandatory. The number of books stored in the facility.

**Building Management System**

Yes / No. Does the facility have installed a computerised Building Management System.

**Building Shape**

Predefined. Mandatory. Select from the dropdown list the building shape that most resembles the actual shape of the building / facility.

**Computers**

*Computer Services/Computer Labs only.* Mandatory. The total number of computers (PCs, Servers, etc) in the facility.

**Continuous Laundry**

*Laundry Facilities only.* Mandatory. The amount of laundry washed per week (kilograms) in a continuous cycle process.

**Customers**

*Café/Canteen Facilities only.* Mandatory. Average number of customers per week.

FIGURE 12-2

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**Days Used**

*Changing Sheds only.* Average number of days used per week.

**Details Finish Date**

Enter the date until which the above details were applicable to.

**Details Start Date**

User Assigned. Enter the date on which the above details were first applicable from.

**Exposure**

Predefined. Please select from the dropdown list the level of exposure to wind and direct sunshine that most corresponds to that experienced by this facility.

**Floor Area**

Mandatory. Total area of covered floor space within the facility (square metres).

**Floor Material**

Mandatory. Select from the dropdown list the floor material option that most closely reflects the construction of the floor/foundations.

**Full Time Equivalents**

*Administration / Office Facilities only.* The number of full time equivalent (FTE) staff working in the facility. Every 40 hours per week of staff time should be regarded as an FTE.

**Glazing**

Predefined. Mandatory. Select from the dropdown list the glazing option that most closely reflects the type of glazing used in exterior windows.

**Heating Control**

Predefined. Mandatory. Select from the dropdown list the control system that most closely reflects that used in this facility.

**Heat Losses**

*Heat Plant Facilities only.* The level of heat losses during transportation from the heat plant to facilities, as a percentage of heat generated.

**Heat Plant**

Predefined. Select from the dropdown list the heat plant that supplies energy to this facility. The heat plant must have already been entered into the application as a facility.

**Humidity**

*Indoor Swimming Pool Facilities only.* The maintained level of humidity for the majority of the facility volume (percentage).

**Income**

*Café / Canteen Facilities only.* Mandatory. Average weekly income (\$) of the facility.

**Kilometres Covered**

*Street lighting only.* Mandatory. The length of roading covered by streetlights (Kilometres).

**Lighting Control**

Predefined. Mandatory. Select from the dropdown list the control system that most closely reflects that used in this facility.

**Lit Area**

*Outdoor Lighting only.* Mandatory. The total area under lighting (square metres).

**Luminares**

FIGURE 12-3

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*Outdoor & Street Lighting only.* Mandatory. The number of lights installed for lighting the area.

**Lux**

*Outdoor & Street Lighting only.* Mandatory. The average level of lighting (in lux) maintained in the area.

**Maintained Temperature**

User Assigned. The target temperature that the facility is maintained at.

**Number of Beds**

*Dorm & Ward Facilities only.* The number of beds contained within the facility.

**Number of Occupants**

*Residential Facilities only.* Mandatory. The number of occupants in the residential facility per day.

**Occupancy**

User Assigned. Mandatory. The percentage of the week that the facility is occupied. Note – total of 168 hours in a week.

**Occupied Bed Days**

*Dormitory & Ward Facilities only.* The average number of occupied bed days in a week. An occupied bed day is essentially a bed that is occupied over night.

**Operating Hours**

*Operating Theatre Facilities only.* Mandatory. The total number of hours per week each operating theatre is in use. E.g. A facility has two operating theatres and they are each used an average of 20 hours per week. The total would therefore be 40 hours.

**Orientation**

Predefined. Please select from the dropdown list the orientation that most corresponds to that of the facility. The decision should be based upon which side of the building has the greater requirements for heating/cooling.

**Parks**

*Parking Facilities only.* Mandatory. The number of car parks within the facility.

**Pipe Diameter**

*Flood & Water & Sewerage Pumping Facilities only.* The diameter (metres) of the pump piping.

**Re-circulation Time (hours)**

*Indoor & Outdoor Swimming Pools only.* Mandatory. The time taken (in hours and fractions of hours) for the total volume of pool-water to be re-circulated through the filtration system.

**Roof Area**

Mandatory. The surface area of the roof (square metres).

**Roof Material**

Mandatory. Select from the dropdown list the roof material option that most closely reflects the construction of the roof.

**Seats**

*Entertainment & Lecture Theatres only.* Number of seats in the facility.

**Storeys**

Number of storeys (including underground/basement levels).

FIGURE 12-4

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**Sub-Facilities**

Yes / No. Does this facility have any other energy using facilities that are significantly different to the main usage. An example might be an office building which also has some retail space, and/or apartments.

**Sub-Facility Type**

Predefined. Choose from the dropdown list the Sub-Facility Types that are located within this facility.

**Sub-Facility Indicator 1**

While not yet defined, this field will be used in future updates to allow for sub-facilities within a facility to have corrections for a share of consumption, and therefore increase the accuracy and relevance of the overall indicator.

**Sub-Facility Indicator 2**

While not yet defined, this field will be used in future updates to allow for sub-facilities within a facility to have corrections for a share of consumption, and therefore increase the accuracy and relevance of the overall indicator.

**Surface Area**

*Outdoor & Indoor Swimming Pools only.* The total surface area of all swimming pools in the facility (square metres).

**Theatres**

*Operating Theatre Facilities only.* Mandatory. The number of operating theatres in the facility.

**Visitors per Week**

Mandatory. The average number of visitors per week.

**Volume**

Mandatory. The volume of the building (cubic metres).

**Volume Heated**

*Heat Plant Facilities only.* Mandatory. The total volume of all facilities that are heated by this heat plant.

**Volume Pumped**

*Flood & Water & Sewerage Pump Facilities only.* The volume of water pumped per week (litres).

**Volume Treated**

*Water & Sewerage Treatment Facilities only.* Mandatory. The Volume of sewerage treated per week (litres).

**Wall Area**

User Assigned. Mandatory. Total area of exterior wall surface (square metres).

**Wall Material**

Predefined. Mandatory. Select from the dropdown list the wall material option that most closely reflects the construction of the exterior walls.

**Water Temperature**

*Outdoor & Indoor Swimming Pools only.* The maintained temperature of the majority of water in the swimming pools.

**Water Volume**

*Outdoor & Indoor Swimming Pools only.* The total volume of water (including in the recirculation / filtration system) for all swimming pools in the facility.

FIGURE 12-5



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**Facility Attributes**

The information fields with \*\* in the heading are fields that are needed to calculate the benchmark figures. If any of these fields are left blank, then no benchmarks will be calculated.

**Construction**

In most cases, allowance is made for multiple types of construction. This is to reflect that buildings change, and may include more than one type of construction. For example a building has concrete block type construction for the ground floor walls, and wooden stud type construction for the upper floor walls. In all cases, the area of the particular type of construction must be specified. Also – for all materials that are specified, the thickness must also be specified.

**Floor Construction**

Allowance is made for up to two different types of floor construction at the base of the facility/sub-facility. This floor construction is made up of the internal lining (e.g. carpet), the load bearing material (e.g. Joists, Concrete pad), and the external lining (e.g. dirt if set into ground). The user must specify whether the floor is an internal or external floor (i.e. is it the separation between two storeys of a building, or is it the base floor of the building). If it is the base floor, the user must also indicate the type of construction of the floor (e.g. solid pad, whether it has a crawlspace etc).

**Wall Construction**

Allowance is made for up to three different types of wall construction for any facility/sub-facility. The wall construction is made of the internal lining material (e.g. gib-board), any insulation that is installed, the main load-bearing material (e.g. concrete blocks, wooden studs etc), and the external material (e.g. weatherboards). In each case the user must specify whether the wall is an internal wall or the external wall of the building.

**Roof Construction**

Allowance is made for up to two different types of roof/ceiling construction for any facility/sub-facility. The roof/ceiling construction is made of the internal lining material (e.g. gib-board), any insulation that is installed, the main load-bearing material (e.g. concrete pad, wooden studs etc), and the external material (e.g. galvanised iron). In each case the user must specify whether the roof/ceiling is an internal ceiling (i.e. another storey above) or the external roof of the building. If external, then the type of construction must also be specified (i.e. loft/attic, pitched, flat etc).

FIGURE 13-1

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**Window Construction**

Allowance is made for up to two different types of window construction for any facility/sub-facility. The window construction is made of the type of glazing used (i.e. tinted, double glazed etc), the frame material (e.g. wooden, aluminium etc).

**Other Attributes***Air-Con Area (sq. Metres)*

Air-conditioned facilities/sub-facilities only. The total floor area of the facility/sub-facility that is air-conditioned.

*Air-Con Controls (for information only)*

Air-conditioned facilities/sub-facilities only. Select from the dropdown list the control system that most closely reflects that used for the air-conditioning in this facility.

*B. M. S. (for information only)*

Yes / No. Does the facility/sub-facility have installed a computerised Building Management System.

*Core Hours*

The number of hours per week, on average, that are the core hours of operation of the facility/sub-facility.

*Core Occupancy*

The average number of occupants in the facility/sub-facility during the core hours.

*Energy Intensity*

The energy intensity, in watts per square metre, of equipment that is used in the facility/sub-facility. For example, fume cupboards in a laboratory or computers in an office environment.

*Exposure*

Please select from the dropdown list the level of exposure that most corresponds to that experienced by this facility/sub-facility.

*Finish Date (for information only)*

Enter the date which this facility/sub-facility ceased to be operational.

*Heat Controls (for information only)*

Select from the dropdown list the control system that most closely reflects that used in this facility/sub-facility.

*Humidity*

The maintained level of humidity for the majority of the facility volume (percentage).

FIGURE 13-2

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***Infiltration***

The number of air-changes per hour due to infiltration of air into the facility/sub-facility due to inflows not attributable to mechanical ventilation.

***Light Controls (for information only)***

Select from the dropdown list the control system that most closely reflects that used in this facility/sub-facility.

***Orientation***

Please select from the dropdown list the orientation that most corresponds to that of the facility/sub-facility.

***Non-Core Hours***

The number of hours per week that the facility/sub-facility is occupied for outside the core hours. This may be time when cleaners are in the facility, or a skeleton overnight staff for example.

***Non-Core Occupants***

The average number of people present in the facility/sub-facility during the non-core hours.

***Number of Air Changes***

The number of air-changes per hour for the air-conditioned area of the facility/sub-facility.

***Shape***

Select from the dropdown list the shape that most closely resembles that of this facility. The Long Rectangular option should be used where the long sides are twice the length (or more) of the short sides. The Short Rectangular option should be used when the long sides are less than twice the length of the short sites.

***Start Date (for information only)***

Enter the date on which this facility/sub-facility commenced operation.

***Storeys (for information only)***

Number of storeys (including underground/basement space).

***Temperature (low and high)***

The target temperatures that the facility is maintained between during the core hours. NB. The mean temperature is used for calculating benchmarks.

***Volume***

The volume of the facility/sub-facility, not including any void spaces (cubic metres).

FIGURE 13-3

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**Appendix G – Consumption Details****Reading Type**

Reticulated Gas and Electricity only. Predefined. Mandatory. Please select the appropriate reading type from the drop-down list for reticulated gas/electricity.

**Day Type**

Time of Use metered electricity and gas only. Predefined. Select the appropriate day-type from the drop down list.

**Consumption Start Date**

Mandatory. Date on which consumption of this block of energy started.

**Consumption Finish Date**

Mandatory. Date on which consumption of this block of energy ended.

**Consumption Start Time**

Time of Use metered electricity and gas only. Time of day at which consumption of this block of energy started.

**Consumption Finish Time**

Time of Use metered electricity and gas only. Time of day at which consumption of this block of energy ended.

**Consumption**

Amount of energy consumed during the current period (kWh). Or:

**Volume Consumed**

Volume consumed of the energy source (e.g. kilograms of coal, litres of diesel, GJ of gas etc.). The consumption figure above (kWh) will be calculated from this.

**KVA**

Time of Use metered electricity only (optional). The KVA reading during this block of consumption.

FIGURE 14

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**Appendix H – Pricing Details****Fixed / Demand Charges****Tariff Start Date**

The Date from which this tariff was available.

**Tariff End Date**

The Date from which this tariff is no longer available.

**Period**

The period that this charge applies for – i.e. is it on a weekly basis, monthly, daily etc.

**Energy**

This charge is for the energy (retailer) component of the fixed / demand charges. Only applies to reticulated electricity and gas.

**Network**

This charge is for the distribution component of the fixed / demand charges. Only applies to reticulated electricity and gas.

**Bundled**

This charge is the total charge applied to fixed / demand charges. It should be the sum of the energy and network charges if these have been entered.

**Unit Charges****Day Type**

Time of Use metered electricity and gas only. Predefined. Mandatory. Select from the drop-down list the appropriate day type.

**Price Start Date**

Mandatory. Date from which this specific price started.

**Price Finish Date**

Mandatory. Date from which this specific price ended.

**Price Start Time**

Time of Use metered electricity and gas only. Time of day at which this price started.

**Price Finish Time**

Time of Use metered electricity and gas only. Time of day at which this price ended.

**Retailer Price**

This charge is for the retailer (sometimes known as energy) component of the unit charges. This figure should include local losses (electricity).

**Network Price**

Applies to reticulated electricity and gas only. This charge is for the distribution (sometimes referred to as lines) component of the unit charges.

**Bundled Price**

This is the total charge applied to unit consumption. It should be the sum of the retailer and network charges if these have been entered.

FIGURE 15

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**Appendix I - Facility Types****Administration / Offices**

A Building/Facility that is primarily used for administration work. Essentially made up of open plan office environments and/or offices. Generally used on a working day, 9-5 basis.

**Cafeteria / Canteen**

A Building/Facility primarily used for the preparation and consumption of food.

**Changing Sheds**

A Building/Facility primarily used as changing rooms. For example ...

**Dormitories**

A Building/Facility primarily used as a dormitory or hostel. This does not include apartment blocks or blocks of flats (refer also Residential Facilities).

**Enclosed Spaces / Foyers**

This refers to large indoor spaces that are used as entrance foyers, gathering places, atriums, or similar.

**Entertainment Theatre**

A theatre attended for entertainment purposes, such as operas, plays, or movies.

**Flood Pumping Station**

A pumping station primarily used for pumping flood, storm, and drain water.

**Gallery**

A facility used for the storage and display of art and similar types of objects.

**Gymnasium**

A facility used for recreational purposes such as weight training, squash etc.

**Heat Plant**

A facility that generates heat for use by other facilities.

**Hospital Wards**

A facility used for the housing and care of hospital patients. Patients usually stay overnight.

**Indoor Swimming Pool**

A recreational swimming pool kept in an enclosed environment (Indoors).

**Laboratories**

A facility used primarily as laboratories for the purposes of research, measurement, or education.

**Laundry**

A facility used to launder clothes and linens.

**Lecture Theatres**

A theatre used for lectures and/or conferences.

**Library**

A facility used for the storage and display of books. These facilities will tend to have fairly specific requirements for temperature and humidity.

**Museum**

FIGURE 16-1

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A facility for the storage and display of art, historical documents, archaeological artefacts, and objects from the natural world.

**Operating Theatre**

Hospital facilities used for performing surgery.

**Outdoor Lighting (Public) / Unenclosed Spaces**

Areas that are exposed to weather which are lit for the purposes of public safety and convenience.

**Outdoor Swimming Pool**

A swimming pool that is not enclosed within another structure.

**Parking Building**

Building used for car-parking.

**Residential Facilities**

Intended to encompass apartment buildings and large blocks of flats. The energy consumption should be for the entire building/block, and not just for communal areas (e.g. stairwells/corridors etc).

**Sewerage Pumping Station**

A pumping station used for pumping sewerage.

**Sewerage Treatment Plant**

A plant used for processing and treating sewerage in order to minimise any harm caused by its discharge.

**Street Lighting**

Lighting used on streets to illuminate the road, intersections, and areas of potential danger (e.g. outside shops, pedestrian crossings etc).

**Toilet Block**

A block of toilets and bathrooms.

**Water Pumping Station**

A pumping station used for pumping water around a mains system, or from a water source.

**Water Treatment Plant**

A plant for treating water to ensure its safety for public consumption.

FIGURE 16-2

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**Appendix J – List of Indicators****Per sq. meter of pool surface (Annualised)**

Indoor swimming pool/Outdoor swimming pool

**Per sq. meter of flooring (Annualised)**

Library/Laboratories/Administration (Office) blocks/Hospital wards/Dormitories/Residential/Museums/Gymnasiums/Large enclosed public spaces/Galleries/Changing Sheds/Canteens/Operating Theatres

**Per Computer (Annualised)**

Computer Services / Computer Labs

**Per visitor (Annualised)**

Museums/Cafeterias/Gymnasiums/Galleries/Toilet Blocks

**Per cubic meter of water pumped (Annualised)**

Flood pumping/Sewerage pumping/Water pumping

**Per cubic meter of treated liquid (Annualised)**

Sewerage treatment/Water treatment

**Per occupied bed day (Annualised)**

Hospital wards/Dormitories

**Per seat (Annualised)**

Lecture theatres/Public theatres

**Per hour of attendance (Annualised)**

Lecture theatres/Public theatres

**Per full time equivalent staff member (Annualised)**

Administration (office) blocks

**Per car park (Annualised)**

Parking buildings

**Per 1000 books (Annualised)**

Libraries

**Per sq. meter of laboratory benches (Annualised)**

Laboratories

**Per occupant (Annualised)**

Residential Facilities

**Per sq. meter of lighted area (Annualised)**

Outdoor lighting

**Per luminaire (light fitting) (Annualised)**

Outdoor Lighting/Street lighting

**Per km of lighted road (Annualised)**

Street lighting

**Per cubic meter heated volume (Annualised)**

Heating Plant

FIGURE 17-1



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**Per kilogram of washing (Annualised)**

Laundries

**Per Operating Hour (Annualised)**

Operating Theatres

FIGURE 17-2

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